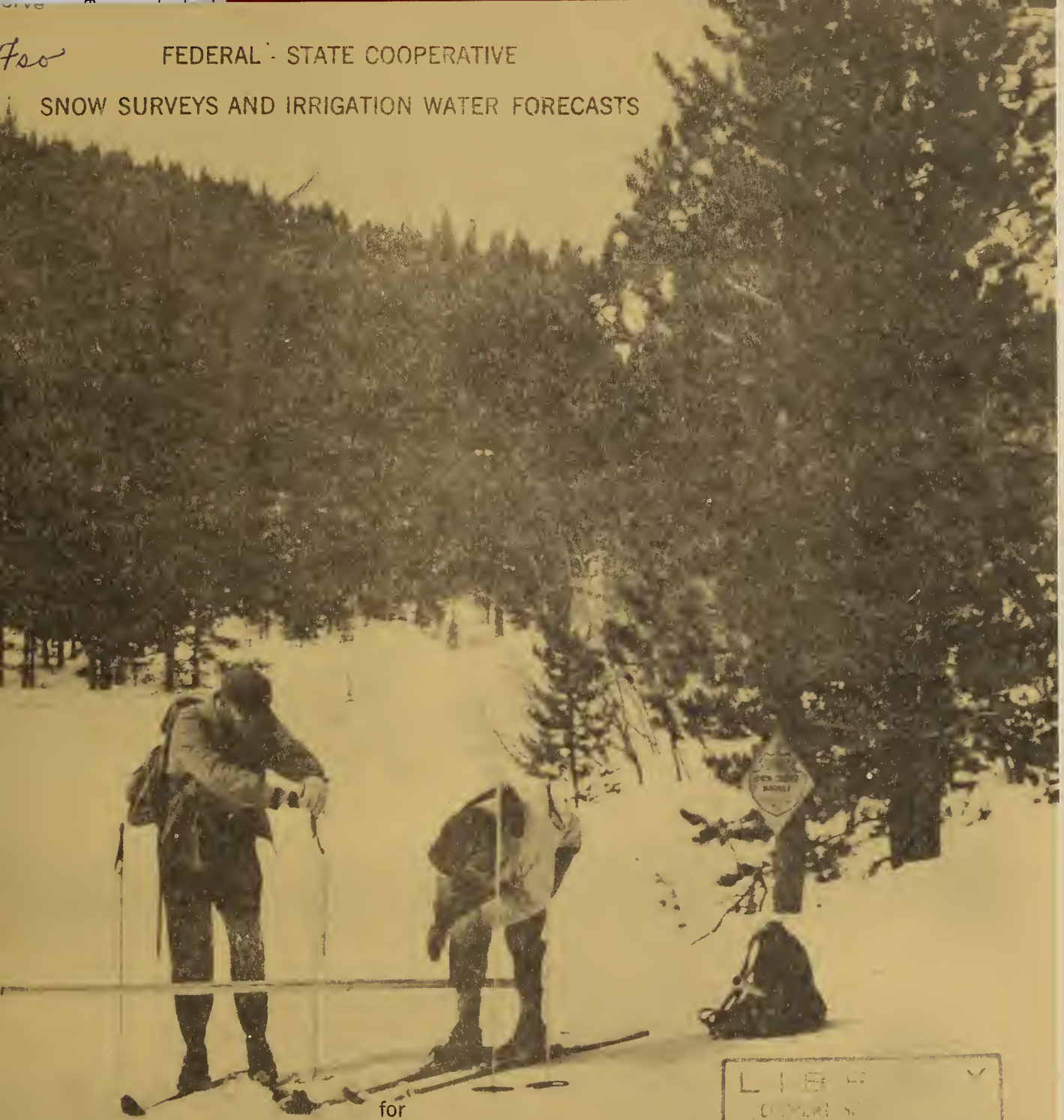
FEDERAL - STATE COOPERATIVE

SNOW SURVEYS AND IRRIGATION WATER FORECASTS



for

Oregon

By

Division of Irrigation, Soil Conservation Service
United States Department of Agriculture
and
Oregon Agricultural Experiment Station

Data included in this report were obtained by the agencies named above in cooperation with the Oregon State Engineer, U. S. Forest Service, National Park Service and other Federal, State and local organizations.

As of

Jan. 1, 1953

UNITED STATES DEPARTMENT OF AGRICULTURE
SOIL CONSERVATION SERVICE

TO RECIPIENTS OF COOPERATIVE SNOW SURVEY
AND WATER SUPPLY FORECAST REPORTS:

Forecasts by U. S. Weather Bureau of total annual streamflow October-September, inclusive, at more than 300 gaging stations are issued monthly January through May in the publication WATER SUPPLY FORECASTS FOR THE WESTERN UNITED STATES.

Weather Bureau forecasts of runoff presented in this bulletin are computed from procedures based on mathematical analysis of the relation between precipitation and runoff.

The Weather Bureau bulletins may be secured by writing to:

Hydrologist in Charge
River Forecast Center
U. S. Weather Bureau
712 Federal Office Building
Kansas City 6, Missouri

FEDERAL-STATE COOPERATIVE

SNOW SURVEYS AND WATER FORECASTS

FOR

OREGON

Report Prepared
by

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Issued

January 9, 1953

Division of Irrigation
Soil Conservation Service
and
Oregon Agricultural Experiment Station
P. O. Box 1149
Medford, Oregon

PRELIMINARY WATER SUPPLY OUTLOOK FOR OREGON

January 1, 1953

Oregon's 1953 water supplies now being "built" into the mountain snow blanket have received a much needed boost from late December storms. Mountain and valley precipitation during the fall was extremely short and, except for the Southern Oregon area, mountain snows have fallen on very dry watersheds. Present snow-cover averages 150 percent normal water content for the entire State with heavy concentrations up to 200 percent normal in the southwest and down to 70 percent normal in the northeastern part of the State. Reservoired water supplies are 12 percent greater than last year and 15 percent greater than average. Indications at this early date are that water supplies could be short next irrigation season in the northeast corner of the State.

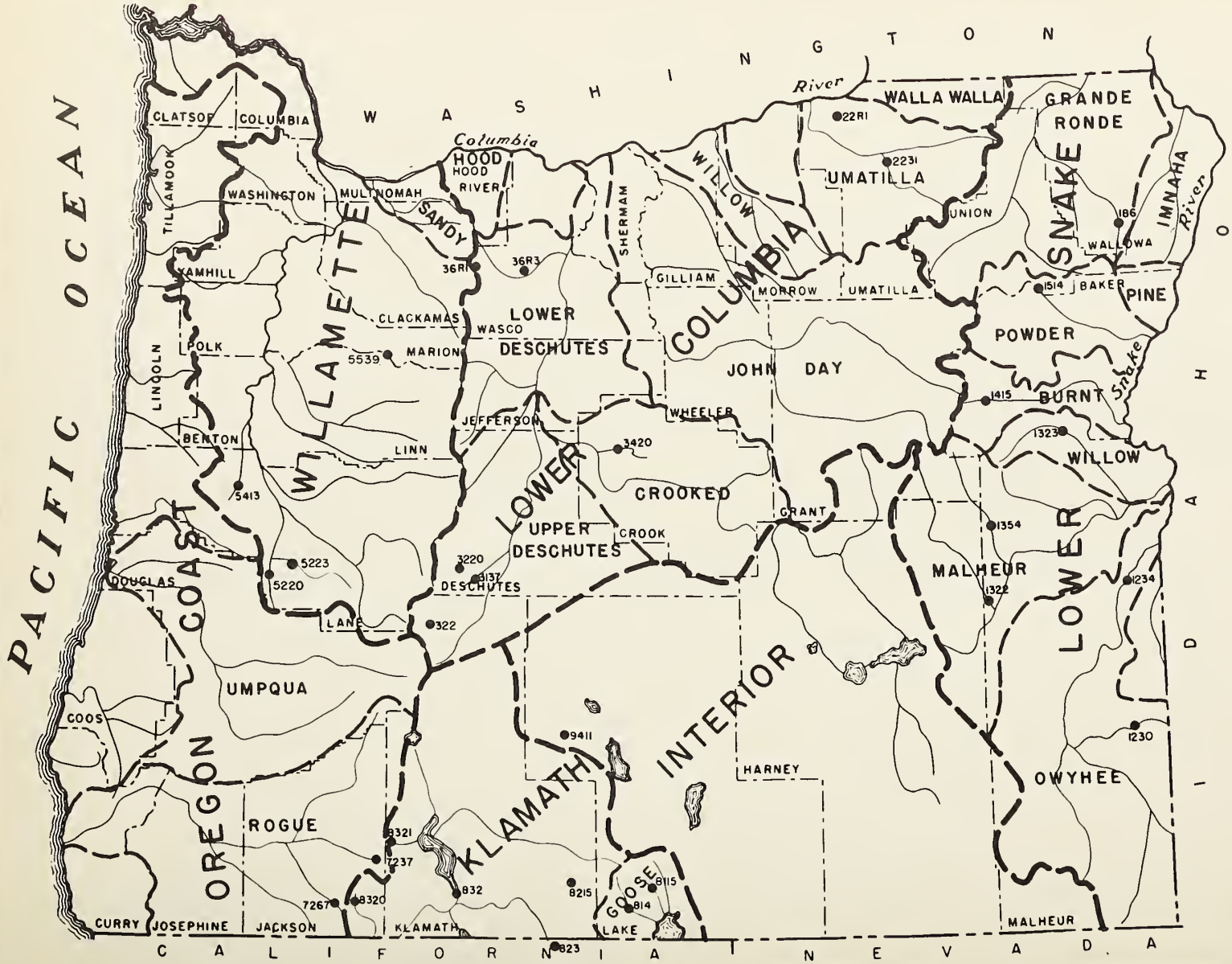
Water content of the mountain snow-cover, as of January 1, averages 150 percent normal on 40 measured snow courses throughout the State but only 77 percent of last year at this date. Snow above 5000 feet has a water content 142 percent normal but only 66 percent of last year. Below 5000 feet, the water content is 87 percent of last year and 158 percent normal. Water content of the snow is below normal only in the Grande Ronde River, Umatilla River and North Fork of John Day River areas where it is about 70 percent normal.

Watershed soils under the snow are unusually dry except in the southwestern portion of the State. This is a direct consequence of the shortage of fall precipitation which was only 10 percent normal in October and 30 percent normal in November over the State. Considerable early snow melt water will be required to "prime" the watershed soils before satisfactory streamflow can be attained next spring.

Preliminary figures of streamflow[1] for the October-December period show flow of Umpqua River has been 68 percent of median with similar comparisons for the John Day River and Columbia River placed at 78 and 99 percent, respectively.

[1]Furnished by U. S. Geological Survey, Water Resources Division, Portland, Oregon.

IMPORTANT OREGON RESERVOIRS



RESERVOIR NAME	NUMBER
Agency Valley	1354
Antelope	1230
Clear Lake	823
Clear Lake	36R1
Cold Springs	22R1
Cottage Grove	5220
Cottonwood	8115
Crane Prairie	3220
Crescent Lake	322
Detroit	5539
Dorena	5223
Drew Creek	814
Emigrant Gap	7267
Fern Ridge	5413
Fish Lake	7237
Four Mile Lake	8321
Gerber	8215
Hyatt Prairie	8320
McKay	2231
Ochoco	3420
Owyhee	1234
Rock Creek	36R3
Thief Valley	1514
Thompson Valley	9411
Unity	1415
Upper Klamath Lake	832
Wallowa Lake	186
Warm Springs	1322
Wickiup	3137
Willow Creek No. 3	1323

ADR-SCS-PORTLAND, ORE. FEB 1953

U.S. DEPARTMENT OF AGRICULTURE, SOIL CONSERVATION SERVICE

RESEARCH
ML NICHOLS, Chief

7-L-3060

STATUS OF OREGON RESERVOIR STORAGE - JANUARY 1, 1953

BASIN and STREAM	RESERVOIR	USABLE CAPACITY (Thousand Acre Feet)	THOUSAND ACRE FEET IN STORAGE ABOUT JANUARY FIRST 1953	1952	1951	1950	10-yr.Avg. 1941-50
		UPPER COLUMBIA DRAINAGE					
		Lower Snake in Oregon					
Owyhee	Antelope	36.5	6.7[f]		11.7	N.R.	0.8
	Owyhee	715.0	472.9	426.6	422.1	355.1	413.6
Malheur	Warm Springs	191.0	97.2	18.4	14.9	9.3	70.0
	Agency Valley	60.0	12.7	11.9	10.1	15.0	33.3
Burnt	Unity	25.2	3.0	4.8	7.3	I.6	7.6
Grande Ronde	Wallowa Lake	40.9	25.6	9.9	20.0	12.1	20.0
		LOWER COLUMBIA DRAINAGE					
Umatilla	McKay	74.0	9.8	18.8	40.3	17.0	30.6
	Cold Springs	50.0	9.5	23.3	30.7	19.1	22.0
Deschutes	Ochoco	46.0	19.2	21.7	30.0	1.7	16.2
	Crescent Lake	54.9	45.2	47.6	53.2	50.3	36.6
	Crane Prairie	55.3	27.8[f]	27.0	30.7	31.1	28.8
	Wickiup	180.0	125.2	137.6	153.8	138.6	58.7[d]
Willamette	Cottage Grove	30.1[a]	0.0	0.0	0.2	0.1	0.5[d]
	Dorena	70.5[a]	0.1	0.8	0.5	0.1	--
	Fern Ridge	94.2[a]	0.2	0.6	0.1	0.3	5.6[e]
	Detroit	340.0[a]	N.R.				
		WEST COAST DRAINAGE					
Rogue	Fish Lake	7.8	5.9	4.3	4.7	4.0	3.8
	Fourmile Lake[b]	16.1	10.3	5.8	9.1	6.7	5.1
	Emigrant Gap	8.3	2.7	7.4	5.5	0.9	3.6
	Hyatt Prairie[b]	16.1	9.5	2.5	3.7	3.0	3.7
Klamath	Upper Klamath Lk.	584.0[c]	317.3	410.4	403.6	198.7	263.4
	Gerber	94.0	40.1	22.1	24.1	11.5	33.3
	Clear Lake	440.2	195.9	72.3	96.6	99.4	198.7
Goose Lake	Cottonwood	4.1	0.0		0.0	0.0	0.0
	Drew	62.5	39.4		N.R.	35.0	32.0

N.R. - No Report

[a]Storage space reserved for flood control.

[b]By ditch to Rogue River side from Klamath drainage.

[c]Based on gage zero elevation of 4135.0.

[d]1943-50.

[e]1944-50.

[f]Partly estimated.

COMPARISON OF SNOW COVER WITH THAT OF PREVIOUS YEARS

The following tabulation of Oregon stream basins presents the water content of the snow about January 1, 1953, as percent of the same date in 1952 and 1951 and average of record.

DRAINAGE	No. of Courses Averaged	Yrs. of Record	January 1, 1953 Water Content as percent of		
			1952	1951	Avg.
UPPER COLUMBIA DRAINAGE (Lower Snake in Oregon)					
Owyhee River	1 - 2	6 - 8	46	178	102
Malheur River	2	15 - 17	69	166	133
Burnt River	2	14 - 17	84	156	140
Powder River	2 - 3	10 - 14	59	125	108
Grande Ronde River	2 - 3	2 - 13	53	106	70
LOWER COLUMBIA DRAINAGE					
John Day River	3 - 4	2 - 17	61	111	86
Deschutes River	3	5 - 15	78	150	119
Willamette Valley Streams	7	2 - 15	67	169	106
Clackamas River	1	15	56	181	124
Santiam Rivers	3	11	81	174	121
McKenzie River	3	2 - 11	68	135	94
Middle Fork Willamette R.	2	4 - 5	67	212	118
Coast Fork Willamette R.	1	4	74	464	166
PACIFIC COASTAL STREAMS					
Umpqua River	2	4 - 23	75	302	184
Rogue River	6 - 7	3 - 15	80	213	172
Klamath Lake Basin	12 - 15	3 - 26	85	212	203
Williamson River	5	7 - 25	70	149	164
Sprague River	3 - 5	13 - 25	106	Inf.	308
Gerber-Clear Lake Basin	3	3 - 22	105	--	231
Goose Lake Basin	2	13 - 22	100	--	273
INTERIOR DRAINAGE					
Harney Basin	2	15 - 16	76	220	169

INDEX TO SNOW COURSES

Number	Name	Elev.
	UPPER COLUMBIA DRAINAGE (Lower Snake in Oregon)	
	OWYHEE RIVER	
Nev. 6	Big Bend	6700
Nev. 7	Fry Canyon	6700
Nev. 5	Gold Creek	6600
Nev. 9	Jack Creek, Lower	6600
Nev. 10	Jack Creek, Upper	7250
Nev. 6	Rodeo Flat	6600
Ida. 12	Silver City	6400
Ida. 13	South Mountain No. 2	6340
Nev. 12	Taylor Canyon	6200
	(The following courses are adjacent to but not on Owyhee Drainage and partially reflect snow conditions on this watershed.)	
Nev. 1	Bear Creek	7600
Nev. 1	Buckskin, Lower	6700
Nev. 2	Buckskin, Upper	7200
Nev. 2	Fox Creek	6600
Nev. 4	Granite Peak	7600
Nev. 3	Martin Creek	6700
Nev. 6	Midas	7200
Nev. 11	Tremewan Ranch	5700
Nev. 4	76 Creek	7100
	MALHEUR RIVER	
133	Blue Mountain Spring	5900
137	Crane Prairie	5375
136	Lake Creek	5120
134	Rock Spring	5100
135	Stinking Water	4800
	BURNT RIVER	
145	Barney Creek	5950
141	Blue Mountain Summit	5096
142	Tipton	5100
	POWDER RIVER	
155	Anthony Lake	7125
154	Bourne	5600
156	Dooley Mountain	5430
151B	Eilerteon Meadows	5400
157	Goodrich Lake	6775
	PINE CREEK	
161	Schneider Meadows	5400
	IMNAHA RIVER	
171	Cowardale	4250
	GRANDE RONDE RIVER	
163	Aneroid Lake No. 1	7480
163A	Aneroid Lake No. 2	7000
166	Beaver Reservoir	5340
167	Camp Carson	6970
166A	Moss Spring	
164	Summit Springs	5300
136	Taylor Green	5740

Number	Name	Elev.
	LOWER COLUMBIA DRAINAGE	
	WALLA WALLA RIVER	
212	Tollgate	5070
	UMATILLA RIVER	
222	Emigrant Springs	3925
223	Lucky Strike	5050
221	Meacham	4300
	JOHN DAY RIVER	
241	Arbuckle Mountain	5400
246A	Beech Creek Summit	4800
244	Dixie Springs	6650
249	Gold Center	5340
245	Olive Lake	6000
246	Schoolmarm	4775
247B	Starr Ridge	5156
	CROOKED RIVER	
343	Derr	5670
344	Marks Creek	4540
341	Ochoco Meadows	5200
342	Tamarack	4800
	UPPER DESCHUTES RIVER	
326	Caldwell Ranch	4400
321	Cascade Summit	4860
327	Charlton Lake	5750
325	Crescent Lake	4760
329	Irish-Taylor	5500
324A	New Dutchman Flat	6400
331	Three Creeks Meadows	5600
323	Willamette Pass	5600
	LOWER DESCHUTES RIVER	
361	Clear Lake	3500
351	Hogg Pass	4755
362	Rock Creek	4200
	HOOD RIVER	
431	Brooks Meadows	4300
433	Cresmpoint Reservoir	3400
434	Red Hill	4400
432	Tilly Jane - Mt. Hood	6000
	SANDY RIVER	
452	Phlox Point - Mt. Hood	5600
451	Still Creek	3700
	WILLAMETTE RIVER BASIN	
	Clackamas River	
592	Clackamas Lake	3400
591	Peavine Ridge	3500

Number	Name	Elev.
	Santiam Rivers	
551	Breitenbush	2325
553	Marion Forks	2730
552	Santiam Junction	3990
	McKenzie River	
531	McKenzie	4800
	Middle Fork Willamette River	
521A	Waldo Lake	5500
	Coast Fork Willamette River	
522	Champion	4500
	Mary's River	
541	Mary's Peak	3620
	OREGON COAST DRAINAGE	
	UMPQUA RIVER	
743	Diamond Lake	5315
742	N. Umpqua nr. Lake Creek	4215
741	Trap Creek	3800
744	Windigo Pass	5600
	ROGUE RIVER	
7218	Althouse	4400
729	Big Red Mountain	6500
722	Billie Creek Divide	5300
725	Fish Lake	4865
7228	Fourmile Lake	6000
727	Grayback Peak	6000
7221	Hobart Lake	5010
723	Hyatt Prairie Reservoir	4900
7210	Little Red Mountain	6500
7220	Scragg Mountain	6200
7211	Seven Lakes No. 1	6600
7212	Seven Lakes No. 2	6200
7219	Silver Burn	3720
726	Siskiyou Summit	4830
7216	South Fork Canal	3500
7213	Wagner Butte	6900
7217	Whaleback	5140
	KLAMATH LAKE BASIN	
831	Annie Spring	6016
634	Chemult	4760
Calif.	Crowder Flat	5200
639	Gerber	4850
635	Lake of the Woods	4960
838	Park Headquarters	6450
637	Strawberry	5600
641	Summer Rim	7200
836	Sun Mountain	5350
842	Taylor Butte	5100
	GOOSE LAKE BASIN	
811	Quartz Mountain	5320

Number	Name	Elev.
	INTERIOR DRAINAGE	
	WARNER LAKE	
911A	Camas Creek	5720
	GUANO LAKE	
Nev. 1	Bald Mountain	6720
	CHEWAUCAN RIVER	
922	Mill Creek	6200
	SILVER LAKE	
942	Silver Creek	4900
	HARNEY BASIN	
952	Fish Creek	7900
961A	Idlewild Camp	5200
964	Izee Summit	5295
951	Silvies	6900
965	Snow Mountain	6300
	McDERMITT CREEK	
Nev. 6	Disaster Peak	6500

THE CALIFORNIA OREGON POWER COMPANY SNOW STATIONS

	KLAMATH LAKE BASIN	
1	Beatty (COPCO)	4400±
2	Chemult (COPCO)	4761
3	Chiloquin (COPCO)	4167
4	Crystal (COPCO)	4200
5	Fort Klamath (COPCO)	4150
6	Kirk (COPCO)	4533
7	Lake of the Woods (COPCO)	4960
8	Harriman Lodge (COPCO)	4200
10	Bly 101 Ranch (COPCO)	4600±
12	Yamsey (COPCO)	4600
	GOOSE LAKE BASIN	
9	Quartz Mountain (COPCO)	5500

WATER CONTENT OF SNOW ON OREGON WATERSHEDS

BASED ON SNOW SURVEYS MADE ON APPROXIMATELY FIRST DAY OF MONTH

(Valley Lands Not Necessarily Included)

OREGON SNOW SURVEYS - ABOUT JANUARY 1, 1953

DRAINAGE BASIN and SNOW COURSE	Number or State	Elev.	SNOW COVER MEASUREMENTS: Date of Survey	Snow Depth (In.)	Water Content (In.): 1953	Same Approx. Date: 1952	Same Approx. Date: 1951	Past Record: Yrs. of Rcd.	Past Record: Avg. Water Cont. (In.)
UPPER COLUMBIA DRAINAGE									
LOWER SNAKE IN OREGON									
OWYHEE RIVER									
Silver City	Idaho12	6400	1/4	24.0	6.6	14.4	--	6	6.6
So. MountainNo.2	Idaho13	6340	12/31	14.0	5.0	11.0[b]	2.8	8	4.8
MALHEUR RIVER									
Blue Mtn. Springs	133	5900	12/30	29.3	6.9	11.0	4.8	17	6.0
Rock Spring	134	5100	12/31	21.0	4.4	5.4	2.0	15	2.5
Stinking Water	135	4800	Not Measured			4.8	--	10	1.9
BURNT RIVER									
Dooley Mountain	156	5430	12/30	24.6	6.2	6.6	3.6	14	3.8
Blue Mtn. Summit	141	5098	12/31	20.9	4.4	6.0	3.3	17	3.7
Tipton	142	5100	12/31	26.1	5.6	--	--	0	--
POWDER RIVER									
Anthony Lake	155	7125	12/31	32.3	7.4	16.4	8.8	13	11.3
Goodrich Lake	157	6775	Not Measured			--	10.5	4	14.7
Dooley Mountain	156	5430	12/30	24.6	6.2	6.6	3.6	14	3.8
Eilertson Meadows	151B	5400	1/1	29.4	7.0	--	4.2	10	4.1
GRANDE RONDE RIVER									
Anthony Lake	155	7125	12/31	32.3	7.4	16.4	8.8	13	11.3
Moss Spring	186A	5850	1/2	31.3	7.3	14.8	5.0	13	9.9
Beaver Reservoir	188	5340	No Report			5.1	3.9	13	5.2
Schoolmarm	248	4775	1/6	14.3	3.6	3.4	--	2	5.0
LOWER COLUMBIA DRAINAGE									
JOHN DAY RIVER									
*Anthony Lake	155	7125	12/31	32.3	7.4	16.4	8.8	13	11.3
Olive Lake	245	6000	Measurement Delayed			11.4	5.9	17	7.1
Blue Mtn. Springs	133	5900	12/30	29.3	6.9	11.0	4.8	17	6.0
Blue Mtn. Summit	141	5098	12/31	20.9	4.4	6.0	3.3	17	3.7
Schoolmarm	248	4775	1/6	14.3	3.6	3.4	--	2	5.0
Tipton	142	5100	12/31	26.1	5.6	--	--	0	--

*Not located directly on this drainage area.

[b]Telegraphic

OREGON SNOW SURVEYS - ABOUT JANUARY 1, 1953

DRAINAGE BASIN and SNOW COURSE	Number or State	Elev.	SNOW COVER MEASUREMENTS: Date of Survey	Snow Depth (In.)	Water Content (In.): 1953	Same Approx. Date: 1952	Same Approx. Date: 1951	Past Record: Yrs. of Rcd.	Past Record: Avg. Water Cont. (In.)
DESCHUTES RIVER									
Cascade Summit	321	4880	1/2	52.2	16.3	27.3	12.3	5	18.3
*Chemult	834	4760	12/31	46.2	12.0	12.6	5.5	15	4.2
Hogg Pass	351	4755	1/1	61.2	20.0	21.6[a]	14.4	11	18.0
WILLAMETTE VALLEY STREAMS									
SANDY RIVER[1]									
Phlox Point	452	5600	Measurement Delayed			40.7	27.3	13	23.0
Still Creek	451	3700	Measurement Delayed			19.2	10.2	12	8.4
CLACKAMAS RIVER									
Peavine Ridge	591	3500	1/3	26.7	7.8	14.0	4.3	15	6.3
Big Bottom	**	2118	1/1	13.7	4.1	5.0	0.7	2	2.8
Lake Harriet	**	2045	1/3	5.5	2.4	2.5	T	2	1.2
SANTIAM RIVERS									
Hogg Pass	351	4755	1/1	61.2	20.0	21.6[a]	14.4	11	18.0
Santiam Junction	552	3990	1/1	43.6	12.8	16.9	7.1	11	10.3
Marion Forks	553	2730	1/1	27.9	8.0	11.6	2.0	11	5.5
Breitenbush	551	2325	No Report			3.8	0.0	8	1.7
Whitewater Bridge	**	2175	1/1	11.3	3.8	10.2	T	3	5.9
Detroit (new town)	**	1500+	1/1	0.0	0.0	2.3	0.0	3	1.5
Detroit Dam	**	1580	1/1	0.0	0.0	2.7	0.0	3	1.7
Mill City	**	826	1/1	0.0	0.0	0.0	0.0	2	0.0
Snow Line: Approximately at 1650' elevation.									
McKENZIE RIVER									
McKenzie	531	4800	12/27	56.6	15.9	32.6	14.6	2	23.6
Hogg Pass	351	4755	1/1	61.2	20.0	21.6[a]	14.4	11	18.0
Santiam Junction	552	3990	1/1	43.6	12.8	16.9	7.1	11	10.3
Dead Horse Grade	**	3800	12/27	33.8	9.0	16.0[b]	4.3	2	10.2
White Branch Slide	**	2800	12/27	18.0	4.7	5.0[b]	1.0	2	3.0
Lost Creek Ranch	**	1956	12/27	4.0	T	--	T	1	T
McKenzie Bridge	**	1372	12/27	0.0	0.0	T[b]	0.0	2	T
Vidae	**	800	12/27	0.0	0.0	0.0[b]	0.0	2	0.0
Snow Line: Belknap Junction, elevation 1678'.									

*Not directly located on this drainage area.

**Auxiliary snow station; average of 3 to 5 samples taken at same point each survey.

[1]Not strictly a part of the Willamette drainage; these surveys are indicative of west slope conditions.

[a]Partially estimated.

[b]Telegraphic.

OREGON SNOW SURVEYS - ABOUT JANUARY 1, 1953

DRAINAGE BASIN and SNOW COURSE	Number or State	Elev.	SNOW COVER MEASUREMENTS: Date of Survey	Snow Depth (In.)	Water Content (In.) 1953	Same Approx. Date 1952	Same Approx. Date 1951	Past Record: Yrs. of Rcd.	Past Record: Avg. Water Cont. (In.)
WILLAMETTE VALLEY STREAMS (Cont'd)									
MIDDLE FORK WILLAMETTE RIVER									
Hiway Summit	**	5128±	Not Measured			--	--	0	--
Cascade Summit	321	4880	1/2	52.2	16.3	27.3	12.3	5	18.2
Champion	522	4500	12/30	52.1	18.1	24.3	3.9	4	10.9
Salt Creek Falls	**	4000	1/2	29.4	8.4	13.4	2.2	3	8.9
Railroad Overpass	**	2750	1/2	6.6	1.6	3.0	0.5	3	2.9
McCrodie Spring	**	2120	1/2	0.0	0.0	1.0	0.0	3	1.1
Oakridge	**	1310	1/2	0.0	0.0	T	0.0	3	0.2
Meridian Dam	**	750	1/2	0.0	0.0	--	0.0	1	0.0
Snow Line: Between 2120' and 2750' elevation.									
COAST FORK WILLAMETTE RIVER (Row River)									
Champion	522	4500	12/30	52.1	18.1	24.3	3.9	4	10.9
Golden Curry Creek	**	3136	12/30	15.3	5.7	7.8	0.8	3	8.9
Weaver Creek	**	2440	12/30	0.0	0.0	2.2	0.0	2	1.1
Lund Park	**	1740	12/30	0.0	0.0	T	0.0	3	3.3
Layng Creek R.S.	**	1200	12/30	0.0	0.0	0.0	0.0	3	0.0
Snow Line: Approximately at 2800' elevation.									
OREGON COAST DRAINAGE									
UMPQUA RIVER									
Diamond Lake	743	5315	1/6	47.5	15.7	20.8	7.2	2	7.6
Champion	522	4500	12/30	52.1	18.1	24.3	3.9	4	10.9
ROGUE RIVER									
*Park Headquarters	838	6450	12/29	90.3	29.0	47.9	25.9	7	23.7
Scragg Mountain	7220	6200	1/3	58.7	21.8	--	2.4	9	10.1
*Annie Spring	831	6018	12/29	82.4	25.3	39.3	19.5	12	15.9
*Fourmile Lake	7223	6000	Measurement Delayed			--	--	0	--
Billie Creek Divide	722	5300	Measurement Delayed			15.6[b]	4.7	13	10.0
Hobart Lake	7221	5010	12/30	24.3	7.7	6.3	--	3	5.1
*Hyatt Prairie Res.	723	4900	12/29	32.4	9.4	7.2	2.1	15	4.2
Fish Lake	725	4865	12/30	34.4	8.9	9.2[b]	1.2	13	5.3
Siskiyou Summit	728	4630	1/7	46.5	14.3	7.9	T	14	3.4
Silver Burn	7219	3720	1/6	39.8	11.9[b]	10.2	0.8	15	3.8
South Fork Canal	7218	3500	1/6	16.0	5.3[b]	3.4	T	14	1.2

*Not directly located on this drainage area.
**Auxiliary snow station; average of 3 to 5 samples taken at same point each survey.
[b]Telegraphic.

OREGON SNOW SURVEYS - ABOUT JANUARY 1, 1953

DRAINAGE BASIN and SNOW COURSE	Number or State	Elev.	SNOW COVER MEASUREMENTS: Date of Survey	Snow Depth (In.)	Water Content (In.): 1953	Same Approx. Date: 1952	Same Approx. Date: 1951	Past Record: Yrs. of Rcd.	Past Record: Avg. Water Cont. (In.)
KLAMATH LAKE BASIN									
Park Headquarters	838	6450	12/29	90.3	29.0	47.9	25.9	7	23.7
Annie Spring	831	6018	12/29	82.4	25.3	39.3	19.5	12	15.9
Fourmile Lake	7223	6000	Measurement Delayed			--	--	0	--
*Quartz Mtn. (COPCO)		5504	1/2	27.0	8.0	8.0[c]	--	22	3.1
Sun Mountain	836	5350	Measurement Delayed			22.1	10.2	13	11.1
*Quartz Mountain	811	5320	1/2	29.5	8.3	8.3	--	13	2.9
Billie Creek Divide	722	5300	Measurement Delayed			15.6	4.7	13	10.0
Lake of the Woods	835	4960	12/30	38.7	10.2	10.4	1.6	16	3.7
Hyatt Prairie Res.	723	4900	12/29	32.4	9.4	7.2	2.1	15	4.2
Gerber	839	4850	1/1	17.1	3.9	3.0	--	3	2.8
Bly 101 Ranch (COPCO)		4800	12/31	15.0	3.8	2.6	0.0	25	0.8
Chemult	834	4760	12/31	46.2	12.0	12.6	5.5	15	4.2
Yamsey (COPCO)		4600	Measurement Delayed			4.1	0.0	23	1.2
Kirk (COPCO)		4533	1/1	36.0	7.8	7.0	1.2	25	2.6
Beatty (COPCO)		4300	12/31	3.0	0.8	0.4	0.0	25	0.2
Crystal (COPCO)		4200	12/31	38.0	9.9	9.6	2.9	23	3.3
Harriman Lodge (COPCO)		4200	12/31	25.0	6.8	6.5	0.2	25	1.8
Chiloquin (COPCO)		4187	1/2	14.0	3.7	3.9	0.0	24	1.0
Fort Klamath (COPCO)		4150	12/31	25.8	6.4	5.1	0.1	26	1.5
GOOSE LAKE BASIN									
Quartz Mtn. (COPCO)		5504	1/2	27.0	8.0	8.0[c]	--	22	3.1
Quartz Mountain	811	5320	1/2	29.5	8.3	8.3	--	13	2.9
CHEWAUCAN RIVER									
*Quartz Mountain	811	5320	1/2	29.5	8.3	8.3	--	13	2.9
HARNEY BASIN									
Idlewild Camp	961A	5200	12/31	21.9	4.2	5.9	1.9	16	2.6
Rock Spring	134	5100	12/31	21.0	4.4	5.4	2.0	15	2.5
Stinking Water	135	4800	Not Measured			4.8	--	10	1.9

*Not located directly on this drainage area.
(COPCO) - Water content determined by melting a measured sample (The California Oregon Power Co.'s Station).
[c]Water content questionable.

OREGON SNOW SURVEYS - DELAYED DATA

DRAINAGE BASIN and SNOW COURSE	Number or State	Elev.	SNOW COVER MEASUREMENTS: Date of Survey	Snow Depth (In.)	Water Content (In.): 1953	Water Content (In.): Same Approx. Date 1952	Water Content (In.): Same Approx. Date 1951	Past Record: Yrs. of Rcd.	Past Record: Avg. Water Cont. (In.)
DECEMBER 1, 1952									
WILLAMETTE VALLEY STREAMS									
CLACKAMAS RIVER									
Peavine Ridge	591	3500	12/29	0.0	0.0	2.4	--	4	3.6
ROGUE RIVER									
Silver Burn	7219	3720	12/2	10.3	1.6	--	--	0	--
South Fork Canal	7218	3500	12/3	5.1	0.5	--	--	0	--
DECEMBER 15, 1952									
ROGUE RIVER									
Billie Creek Divide	722	5300	12/18	34.4	8.8	--	--	0	--
KLAMATH LAKE									
Billie Creek Divide	722	5300	12/18	34.4	8.8	--	--	0	--
Gerber	839	4850	12/15	10.3	2.3	1.2	--	1	1.2

OREGON PRECIPITATION[a]

DRAINAGE DIVISIONS	CURRENT YEAR Oct. 1, 1952-Jan. 1, 1953		LAST YEAR Oct. 1, 1951-Jan. 1, 1952	
	P	D	P	D
Southeastern	1.70	- 1.10	4.73	+ 1.99
Southcentral	2.00	- 1.12	4.71	+ 1.48
Central	2.41	- 1.20	5.15	+ 1.45
Columbia River	3.37	- 2.33	6.90	+ 0.96
Wallowa Mountains	2.30	- 3.20	5.62	+ 0.58
Blue Mountains	2.45	- 2.00	5.16	+ 0.64
Southern	8.34	- 1.53	16.45	+ 6.53
Willamette Valley	11.34	- 8.41	27.03	+ 5.85

P - Inches Precipitation D - Inches Departure from Normal

Southeastern - Malheur and Owyhee drainages.

Southcentral - Interior Basin drainages and Goose Lake.

Central - Deschutes and Crooked drainages.

Columbia River - Lower valleys of the Walla Walla, Umatilla, John Day, Deschutes and Hood River drainages.

Wallowa Mountains - Imnaha, Wallowa, Catherine, Eagle and Pine drainages.

Blue Mountains - Upper valleys of the Burnt, Powder, Grande Ronde, Umatilla, Walla Walla, John Day, Silvies and Malheur drainages.

Southern - Umpqua, Rogue and Klamath drainages.

Willamette Valley - All Willamette drainages.

NOTE: Stations used for determining the averages for the current year are not necessarily the same as those used last year.

[a]Preliminary data computed from Weather Bureau records.

The following organizations cooperate in the Oregon snow survey work:

STATE

Idaho Cooperative Snow Surveys
Nevada Cooperative Snow Surveys
Oregon Agricultural Experiment Station
Oregon State Engineer and corps of State Watermasters
Oregon State Highway Engineers

FEDERAL

Department of Agriculture
  Forest Service
  Soil Conservation Service
Department of Commerce
  Weather Bureau
Department of the Interior
  Bonneville Power Administration
  Bureau of Reclamation
  Fish and Wildlife Service
  Geological Survey
  Indian Service
  National Park Service
Department of National Defense
  Army Engineer Corps

PUBLIC UTILITIES

California-Pacific Utilities Company
Portland General Electric Company
The California Oregon Power Company

MUNICIPALITIES

City of Baker
City of La Grande
City of The Dalles

IRRIGATION DISTRICTS

Associated Ditch Companies
Central Oregon Irrigation District
Deschutes County Municipal Improvement District
East Fork Irrigation District
Grants Pass Irrigation District
Jordan Valley Irrigation District
Lakeview Water Users, Incorporated
Medford Irrigation District
Ochoco Irrigation District
Rogue River Irrigation District
Talent Irrigation District
Vale-Oregon Irrigation District
Warmsprings Irrigation District

PRIVATE ORGANIZATIONS

Amalgamated Sugar Company
South Wasco Soil Conservation District
The Crag Rats, Hood River, Oregon

Federal - State - Private

COOPERATIVE SNOW SURVEYS

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Furnishes the basic data necessary for forecasting water supply for irrigation, domestic and municipal water supply, hydro-electric power generation, navigation, mining and industry

"WATER IS THE WEST'S GREATEST RESOURCE"